

**What is claimed is:**

1. A method of generating a ring back tone in a first terminal communicating based on an internet protocol, the method  
5 comprising:

identifying type of a network to which a second terminal requesting a call setup belongs;

generating ring back tone data to be transmitted to the second terminal according to the type of the network;

10 inserting the ring back tone data into a response message to the call setup; and

transmitting the inserted response message to the second terminal.

15 2. The method of claim 1, wherein the response message comprises at least one data packet communicated based on real-time transport protocol.

3. The method of claim 1, further comprising:

20 storing the ring back tone data; and

reading the stored ring back tone data according to a first-in first-out method so as to insert the ring back tone data to the response message.

4. The method of claim 1, wherein the type of the network is identified based on a specific message transmitted from the network.

5 5. The method of claim 1, wherein the type of the network is identified based on a number of the second terminal.

6. The method of claim 5, wherein the type of the network is identified based on a prefix included in the number of the  
10 second terminal.

7. The method of claim 4, wherein the specific message informs that the network has no function for generating the ring back tone data.

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8. The method of claim 1, wherein if the type of the network is a public switched telephone network, the first terminal generates the ring back tone data.

20 9. A first terminal communication based on an Internet protocol comprising:

a decision section for deciding whether to generate ring back tone data after identifying a type of a network to which a second terminal requesting a call setup belongs; and

a signal processor for generating the ring back tone data to be transmitted to the second terminal according to the type of the network and inserting the ring back tone data into a response message to the call setup.

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10. The first terminal of claim 9, wherein the response message comprises at least one data packet based on real-time transport protocol.

10 11. The first terminal of claim 9, wherein if the type of the network is a public switched telephone network, the signal processor generates the ring back tone data.

12. The first terminal of claim 9, further comprising:  
15 a memory for storing the ring back tone data,  
wherein the signal processor reads the stored ring back tone data according to a first-in first-out method so as to insert the ring back tone data in the response message.

20 13. The terminal of claim 9, wherein the type of the network is identified based on a specific message transmitted from the network.

14. The terminal of claim 9, wherein the type of the network is identified based on a number of the second terminal.

15. The terminal of claim 14, wherein the type of the network is identified based on a prefix among the number of the second terminal.

16. The terminal of claim 13, wherein the specific message informs that the network has no function of generating the ring back tone data.

17. A method for generating a ring back tone for terminals which are operated based on different communication protocols, comprising:

receiving a call setup message from an access point of a first network connected to a first terminal;

inserting ring back tone data into a response message to the call setup message; and

transmitting the inserted response message to the access point;

wherein the ring back tone is reproduced from the response message at the access point.

18. The method of claim 17, wherein the response message comprises at least one data packet based on real-time transport protocol.

5        19. The method of claim 17, wherein if the type of the network is a public switched telephone network, the first terminal generates the ring back tone data.

20. A system for generating a ring back tone for terminals  
10 which are operated based on different communication protocols, comprising:

    a first terminal in a first network;

    a second terminal in a second network, the second terminal generating ring back tone data in response to a request of call  
15 setup from the first terminal and inserting the ring back tone data into a response message based on real time transport protocol; and

    a connecting mechanism for transmitting a call setup message to the second terminal and re-producing a ring back tone from the  
20 response message,

    wherein the first terminal belongs to a public switched telephone network and the second terminal belongs to an Internet protocol network.